## ABSTRACT

The invention relates to the use of morpholinonucleosides of formula:

in which  ${\ensuremath{R}}^1$  represents a nucleic base and  ${\ensuremath{R}}^2$  represents a group corresponding to one of the following formulae:

$$\begin{array}{lll} - (CH_2)_n - NH_2 & - (CH_2)_n - SH \\ - (CH_2)_n - COOH & - (CH_2)_n - OH \\ - (CH_2)_n - NH - R^3 & - (CH_2)_n - SR^3 \\ - (CH_2)_n - CO - R^3 & - (CH_2)_n - OR^3 \end{array}$$

in which n is an interger ranging from 1 to 12 and  ${\tt R}^3$  is a group derived from a label, from a protein, from an enzyme, from a fatty acid or from a peptide, as chain terminators in a process of DNA or RNA sequencing by the Sanger method, or for the labelling of DNA or RNA fragments.